

APPENDIX A-1

MASTER SURFACE USE PLAN

CAVE GULCH-BULLFROG-WALTMAN NATURAL GAS DEVELOPMENT PROJECT

1) EXISTING ROADS

- (a) Refer to "Vicinity Map" for location of well and access route.
- (b) Directions to wellsite - "SITE SPECIFIC" (Note - Items identified as "SITE SPECIFIC" will be addressed in the individual APDs submitted by the operators).
- (c) Refer to the "Topographic Location Map", for location of existing roads within a two mile radius of the well. Additional existing roads are shown on Vicinity Map.
- (d) Existing Authorizations - "SITE SPECIFIC"

The existing road will be maintained in the same or better condition as existed prior to the commencement of operations and said maintenance will continue until final abandonment and reclamation of this drilling location.

2) NEWLY CONSTRUCTED ROAD

- (a) Surface Ownership - "SITE SPECIFIC"
- (b) Prior to new road construction, the top 6-8 inches of soil and associated vegetative material will be removed and windrowed on one side of the road. After ditching is complete, the windrowed topsoil will be rounded, flattened so as not to trap snow.
- (c) Newly constructed roads will be ditched and crowned with an initial travel surface of 18 feet for main roads and 16 feet for short lateral roads to well sites. The placement of drainage control structures (culverts, wing ditches, ditch blocks, etc.) will be determined on a case by case basis as needed to prevent ponding and to allow for unobstructed surface water flows. Where appropriate, and considering such factors as road location, and favorable weather and terrain conditions, the operators are proposing to construct natural surface roadways to well sites to reduce environmental impacts (i.e., soil and vegetation disturbance) and the amount of reclamation. If the well is determined to be productive, the road would be constructed to Manual 9113 standards.

Drainage control structures, turnouts, etc. - "SITE SPECIFIC"

- (d) If the well is successfully completed as a producer, all newly constructed road will be surfaced with 4-6 inches of crushed rock or gravel in problem areas or along the entire length should conditions warrant. The finished travel surface after placement of gravel will be 16'.

APPENDIX A-1: MASTER SURFACE USE PLAN

- (e) All equipment and vehicles will be confined to the access road, pad and areas specified in this APD.
- (f) Maximum grade of new road - "SITE SPECIFIC"

3) LOCATION OF EXISTING WELLS

"SITE SPECIFIC"

4) EXISTING/PROPOSED FACILITIES FOR PRODUCTIVE WELL

- (a) A plat or diagram shall be included in the APD showing, to the extent known or anticipated, the location of all production facilities and lines to be installed if the well is successfully completed for production. If new construction is planned, the dimensions of the facility layouts will be included.

If the location of the production facilities and lines cannot be accurately presented in the APD and the well is subsequently completed for production, the proposed location of production facilities will be submitted via Sundry Notice for approval prior to installation of said facilities. Production tanks, including dikes, (and other production facilities when possible/practical) will be placed on the cut portion of the pad and be located so as to maintain minimum distances between equipment and tanks for safety purposes. Facilities will be located a minimum of 25' from the toe of the back cut.

- (b) All permanent above-ground structures not subject to safety considerations will be painted "Carlsbad Canyon" tan, color 2.5Y 6/2 of the "Standard Environment Colors".
- (c) A dike will be constructed around the tank(s). The dike will be constructed of compacted subsoil, be impervious, and hold 1.1 times the capacity of the largest tank.

5) LOCATION & TYPE OF DRILLING WATER SUPPLY

Water for drilling operations will be provided by private contractor service. This contractor is responsible for obtaining all required permits from the Wyoming State Engineer. Water will be trucked over existing improved road to the location. No additional federal authorizations will be required for this activity. Water sources will be private.

Water Source and Contractor - "SITE SPECIFIC"

6) CONSTRUCTION MATERIALS

- (a) No construction material will be needed for well pad construction; surface and subsurface spoil material will suffice.
- (b) If production is established, construction materials which may be required for the surfacing of the access road and for installation of the production facilities will be purchased from a supplier having a permitted source of materials.
- (c) No construction materials will be taken from Federal lands without prior approval from the appropriate Surface Management Agency.

7) METHODS FOR HANDLING WASTE DISPOSAL

- (a) The reserve pit will be designed to prevent the collection of surface runoff and will be constructed with a minimum of 1/2 the total depth below the original ground surface on the lowest point within the pit.

The reserve pits will be lined. The liner will be impermeable (i.e. having a permeability of less than ten to the minus seven cm./sec.). The liner must be chemically compatible with all substances which may be put in the pit and installed in a competent manner. If a man-made synthetic material is used it will be of sufficient strength and thickness to withstand normal installation and use. To insure that the liner has a "life" long enough to meet its intended use, the liner will be resistant to chemical attack by liquid hydrocarbons and ultra violet light. The liner will be rolled into place and secured at the ends, i.e. buried in the top of the pit berms.

Prior to use, the reserve pit will be fenced on three sides, and the fourth side will be fenced at the time the rig is removed. Netting will be installed over the reserve pit in accordance with the individual well site reclamation plan. Drilling fluids, cuttings and produced water will be contained in the reserve pit (trash will be placed in the trash cage). Fluids in the reserve pit will be allowed to evaporate prior to pit burial.

- (b) Garbage and other trash will be contained in a portable trash cage and hauled off the location to an authorized disposal site. Any trash on the pad will be cleaned up prior to the rig move off location and hauled to an authorized disposal site.
- (c) Sewage will be handled in self-contained, chemically treated portable toilets and the contents hauled off location to an authorized sanitary disposal facility.
- (d) Any hydrocarbons produced during completion work will be contained in test tanks and removed from location at a later date.

8) **ANCILLARY FACILITIES**

"SITE SPECIFIC"

9) **WELL SITE LAYOUT**

- (a) Please refer to "Well Site Layout" and "Well Pad Cross Sections". The proposed well site is staked and four 200-foot reference stakes are present.
- (b) If snow is present on the ground at the outset of construction activities, the snow will be removed before the soil is disturbed and piled downhill from the topsoil stockpile location.
- (c) Plans for removal and storage of topsoil are presented in **Item 10)** below.
- (d) Soil material and overburden will not be pushed over side slopes or into drainages. All soil material disturbed will be placed in an area where it can be retrieved.
- (e) The location (including the reserve pit) will be designed to prevent the collection of surface runoff.
- (f) Plans for lining of the reserve pit are presented in **Item 7)** above.
- (g) Cut and fill slopes on the pad will be constructed no steeper than 1-1/2:1.
- (h) Maximum cut and fill slopes on well pad - "SITE SPECIFIC"
- (i) All equipment and vehicles will be confined to the access road, pad and area specified in this APD.

10) **SURFACE RECLAMATION PLANS**

(a) **Well Site and Newly Constructed Access Road**

Prior to pad construction, the top 6-8 inches (more if available) of soil and associated vegetative material will be removed from the location (including areas of cut, fill and/or subsoil storage areas) and stockpiled. The reserve pit will be allowed to dry prior to the commencement of backfilling work. No attempts will be made to backfill the reserve pit until the pit is free of standing water. Rat and mouse holes will be filled and compacted from bottom to top immediately upon release of the drilling rig from the location.

APPENDIX A-1: MASTER SURFACE USE PLAN

Dry Hole - In the event of a dry hole, the well site and newly constructed access road will be restored to their approximate original contour. For the well pad, this will consist of pushing fill material into the cuts and up over the backslope. For the access road, all culverts and the road crown and ditches will be removed. Wing ditches will be reshaped to their approximate original contour. Existing drainages will be restored to approximate original bank configuration and bottom depth.

- 1) Prior to the replacement of topsoil, the surface will be shaped to the approximate original ground contour. For areas where the ground surface is hard, the surface will be scarified by ripping or disking before topsoil is replaced.
- 2) The reserved topsoil will then be evenly distributed over the disturbed area and disked into the existing soils.
- 3) Care will be taken during reshaping of the pad and access road area to insure there will be no depressions that will trap water or form ponds.
- 4) All newly disturbed areas will be seeded as provided below.

Producing Well - All areas of the well pad which are not needed for production operations will be reshaped and seeded as provided below.

- 1) Backslopes and foreslopes will be reduced as practical and scarified by disking the with contour.
- 2) The reserved topsoil will be evenly distributed over the slopes and disked along the contour.
- 3) Slopes will be seeded as provided below.

- (b) Seed Mixture - Seed will be applied with a drill along the reshaped contour at the following rate and mixture. If hand broadcast, the rate will be doubled. Hand broadcasting will occur on areas too steep for machinery, with the seed raked to assure adequate cover.

<u>Seed Mixture</u>	<u>Pounds/acre PLS</u>
Thickspike wheatgrass	4
Streambank wheatgrass	3
Green needlegrass	3
Annual ryegrass	1
Slender wheatgrass	3

Total 14 lbs/acre PLS

(PLS formula: % of germination (x) % of purity (x) 100%)

APPENDIX A-1: MASTER SURFACE USE PLAN

- (c) Reclamation operations for the well pad are expected to require one week and will begin when the fluids in the reserve pit have evaporated. Seeding will take place either during the fall (prior to ground frost) or spring (after frost leaves the ground) months. If the well is a producer, restoration of un-needed portions of the pad will commence as soon as practical after the installation of production facilities.
- (d) All soil material that will be stockpiled for ten months or longer must be signed and stabilized with vegetation. The stockpiles will be seeded with Millet or Oats at a rate of twenty pounds of seed per acre.
- (e) Any hydrocarbons floating on the surface of the reserve pit will be removed as soon as possible after drilling operations are completed.
- (f) If any oil is on the pit and is not removed within one week after drilling operations cease, the pit containing the oil or other adverse substances will be flagged overhead or covered with wire or plastic mesh to protect migrating birds.
- (g) The operators will be responsible for the weed control on disturbed areas within the exterior limits of the permit. The control methods must be undertaken in accordance with guidelines established by the BLM, State, and local authorities. Prior approval is required on federal surface and use of pesticides will be limited to those approved by the AO. Prior BLM approval is not required on split estate, however, compliance with EPA regulations and State Law is required.

11) SURFACE OWNERSHIP

Ownership along road and at wellsite - "SITE SPECIFIC"

Landowner Agreement - "SITE SPECIFIC"

12) OTHER INFORMATION

- (a) A Class III Cultural Resource Inventory of the well location and new access route has been conducted by Archaeological Energy Consulting of Casper, Wyoming. This report has been submitted to the BLM Platte River Resource Area Office for review.
- (b) If archaeological, historical or vertebrate fossil materials are discovered during the course of well pad and/or access road construction, the operators will suspend all operations that further disturb such materials and immediately contact the BLM Mills office (264-7500). Operations in the area of discovery will not resume until written authorization to proceed has been issued by the BLM Authorized Officer.

The operator is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop

APPENDIX A-1: MASTER SURFACE USE PLAN

work that might further disturb such materials, and contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

- whether the materials appear eligible for the National Register of Historic Places;
- the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary);
- and, a time-frame for the AO to complete an expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities and avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

- (c) The BLM Platte River RA office will be notified when a rig has been selected and will be provided with a schematic diagram of well pad usage areas.
- (d) Verbal notification will be given to the Environmental Scientist at least 3 working days in advance of access road/well pad construction, seeding, and the initiation of any reclamation work.
- (e) The spud report will be called in to the BLM Platte River Resource Area office (261-7500) 48 hours after spudding.
- (f) All undesirable events (fires, blowouts, spills, discharges) will be reported to the BLM Platte River RA within 24 hours. A written report will follow within 15 days.

APPENDIX A-1: MASTER SURFACE USE PLAN

13) **CERTIFICATION** - (to be provided on each individual APD)

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by Barrett Resources Company and Chevron U.S.A. and their contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

DATE _____

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DATE _____

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